PATENT
Docket No.: HI03027USU (P02017US)

I. IN THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning on page ~~4~~, line 26, and ending on page 5, line 7, which begins with "FIG. 1 illustrates an acoustic waveguide 100", with the following rewritten ~~paragraph~~:

- - FIG. 1 illustrates an acoustic waveguide 100 formed by a continuous three-dimensional curved surface. The acoustic waveguide has a circular throat end 102 and a closed control curve that forms a mouth 104. The form of the acoustic waveguide may have an upper vertical control curve 106, a lower vertical control curve 108, a right horizontal control curve 110, and a left horizontal control curve 112. Each control curve may be coincident with the surface of the acoustic waveguide in addition to the circular throat end 102 and the closed control curve that forms the mouth 104. The right horizontal control curve 110 and left horizontal control curve 112 are shown converging as they move from the mouth 104 or throat end 102 and then diverging as they approach the other end of the acoustic waveguide ~~waveguide~~ 100. The right horizontal control curve 110 and left horizontal control curve 112 may be mirrored about an imaginary centerline 114. Similarly, the upper vertical control curve 106 and the lower vertical control curve 108 may be mirrored about the imaginary centerline 114. The control curves rest in the horizontal and vertical planes and may also be free of any discontinuities, i.e. they may be continuous curves, such as, but not limited to, convergent-divergent, rational B-spline, parabolic, hyperbolic, ellipsoidal, linear, or exponential curves. In the exemplary

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embodiment shown in FIG. 1, control curves 106, 108, 110 and 112 are convex relative to the centerline 114. - -

Please replace the paragraph on page 7, lines 7 – 21, which begins with "In FIG. 5", with the following rewritten paragraph:

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- - In FIG. 5, an illustration of an acoustic waveguide 500 formed by a continuous three-dimensional curved surface is shown. The horn has a circular throat end 502 and a mouth 504. The surface portions that connect the circular throat end 502 and the closed control curve of a mouth 504 are identified as having an upper vertical control curve 506, a lower vertical control curve 508, a right horizontal control curve 510, and a left horizontal control curve 512. The right horizontal control curve 510 and left horizontal control curve 512 may be mirrored about an imaginary centerline 514 and are not convergent-divergent control lines. Similarly, the upper vertical control curve 506 and the lower vertical control curve 508 may be mirrored about the imaginary centerline 516. The control curves may be positioned in the horizontal and vertical planes and discontinuities may be minimized such that continuous curves may be formed. Examples include rational B-spline, parabolic, hyperbolic, ellipsoidal ~~ellipsesodial~~, or exponential curves. In the exemplary embodiment shown in FIG. 5, control curves 506, 508, 510 and 512 are convex relative to the axial centerline of the waveguide structure. In a less desirable embodiment, discontinuities may appear in the surface structure, however, this may limit optimal performance. These discontinuities may also be the result of, or formed during, manufacturing processes. - -